

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* FRANK SEMERSKY, JOHN W. TOBIAS,  
and ROBERT A. STEWART

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Appeal 2007-1858  
Application 10/800,566  
Technology Center 3700

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Decided: August 28, 2007

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Before BRADLEY R. GARRIS, CHUNG K. PAK, and  
CHARLES F. WARREN, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 3 through 21, all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 6.

*STATEMENT OF THE CASE*

The subject matter on appeal is directed to a method of packaging a food product in a blow-molded PET plastic container (Specification 1). Further details of the appealed subject matter are recited in representative claims 3 and 9 reproduced below:

3. An energy-efficient method of packaging a food product, comprising the steps of:

selecting a blow-molded PET plastic container having a sidewall with a plurality of peripheral vertically-spaced grooves, a dome located above said sidewall having a blown, wide-mouth opening adapted to receive a sealed closure, a footed base below said sidewall, an upper label bumper extending around the upper end of said sidewall subjacent said dome, a lower label bumper extending around the lower end of said sidewall superadjacent said base;

hot-filling the container with said food product;

capping the filled container;

heating the filled and capped container for a time at a temperature sufficient to pasteurize said food product; and

cooling the pasteurized filled and capped container to ambient temperature.

9. An energy-efficient method of packaging a volatile food product that requires pasteurization at elevated temperatures after the food product is packaged in a container that has been filled and capped, comprising the steps of:

hot-filling a blow-molded plastic container with said volatile food product at a temperature of at least 180°F, said container having a sidewall stiffened against distortion, a dome located above said sidewall and having an opening adapted to receive a sealed closure, a base located below said sidewall, an upper label

bumper extending around an upper end of said sidewall  
subjacent said dome, and a lower label bumper extending  
around a lower end of said sidewall superadjacent  
said base;

capping said container immediately after said hot-filling step;

heating said container and packaged volatile food product after said  
capping step to a temperature in a range of at least about 190-  
210°F for a time sufficient to pasteurize said food product  
without subjecting the base to undesirable distortion;  
and

cooling said container and packaged volatile food product after said  
heating step to ambient temperature.

As evidence of unpatentability of the claimed subject matter, the  
Examiner has relied upon the following references:

Prevot	US 5,887,739	Mar. 30, 1999
Krishnakumar	US 5,908,128	Jun. 1, 1999

The Examiner has rejected claims 3 through 21 under 35 U.S.C. § 103  
as unpatentable over the combined disclosures of Krishnakumar and Prevot.

The Appellant appeals from the Examiner's decision rejecting the  
claims on appeal under 35 U.S.C. § 103(a).

### *ISSUES*

Would one of ordinary skill in the art, armed with the knowledge of  
Krishnakumar and Prevot, have been led to employ the wide-mouth  
pasteurizable plastic container recited in claim 3 and the pasteurization  
temperature recited in claim 9 within the meaning of 35 U.S.C. § 103?

*FACTS, PRINCIPLES OF LAW, AND ANALYSES*

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary consideration (e.g., unexpected results). *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). “[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) *quoting In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006); *see also DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1361, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006)(“The motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself.”); *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)(“Having established that this knowledge was in the art, the examiner could then properly rely, as put forth by the solicitor, on a conclusion of obviousness ‘from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.’”).

Here, Krishnakumar teaches (col. 1, ll. 5-9) that:

The present invention relates to a pasteurizable plastic container having a plurality of flexible panels which accommodate both an increase and subsequent decrease in

pressure during pasteurization, in order to avoid permanent uncontrolled deformation of the container.

The pasteurizable plastic container is blow molded from an injection molded preform made with PET (col. 3, ll. 62-67). The container has a substantially transparent biaxially-oriented body having an open top end 32, an upper flared shoulder section 134 corresponding to the claimed dome, an upper bumper 133 corresponding to the claimed upper label bumper, a side wall having recessed circumferential hoop ribs 137 and 139 corresponding to the claimed plurality of peripheral vertically-spaced grooves, a standing ring or chime 143 corresponding to the claimed footed base, and a lower bumper 145 corresponding to the claimed lower label bumper (col. 3, l. 62 to col. 4, l. 61; and Figures 3 and 4). To the extent that the standing ring or chime 143 does not correspond to the claimed footed base, the Specification at page 4 acknowledges that such footed base is known to be a pressure-resistant configuration, thus supplying an appropriate reason to provide the claimed footed base configuration in the above pasteurizable plastic container.

The container is hot-filled with a food product (beverage), sealed, pasteurized, and cooled (col. 1, ll. 5-56 and col. 4, l. 62 to col. 5, l. 13). The container “has undergone strain-induced crystallization to provide increased strength. . . . The panel section [side wall] of the container has an average crystallinity of up to 30%, preferably on the order 18 to 28%, and more preferably on the order of 21 to 28%” (col. 6, l. 60 to col. 7, l. 15). The employment of flexible panels on the side wall (panel section) to prevent excessive permanent deformation of the container is critical (col. 3, ll. 41-53,

and col. 5, ll. 1-16). Krishnakumar does not specifically mention the wide-mouth pasteurizable plastic container recited in claim 3 and the pasteurization temperature recited in claim 9.

The dispositive question is, therefore, whether one of ordinary skill in the art would have been led to employ the claimed wide-mouth pasteurizable plastic container and pasteurization temperature within the meaning of 35 U.S.C. § 103. On this record, we answer this question in the affirmative.

Although Krishnakumar exemplifies pasteurizing beverage, such as juice, in a narrow-mouth container, it is not limited to such a container. As indicated *supra*, Krishnakumar broadly teaches employing flexible panels on the side wall of any “pasteurizable plastic container” to minimize excessive permanent deformation of the container during pasteurization and cooling. Thus, for given food products to be pasteurized, one of ordinary skill in the art would have been led to select appropriately sized pasteurizable plastic containers, including those having wide-mouth openings, and appropriate pasteurization temperatures. *KSR Int’l Co.*, 127 S. Ct. at 1740-41, 82 USPQ2d at 1396; *DyStar Textilfarben GmbH*, 464 F.3d at 1361, 80 USPQ2d at 1645; *Bozek*, 416 F.2d at 1390, 163 USPQ at 549. This is especially true in this situation since the pasteurizable plastic container opening sizes and pasteurization temperatures are result effective variables, i.e., they are known to be dependent on the types and sizes of food products to be pasteurized. *See In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980) (“[D]iscovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.”).

In any event, Prevot refers to a high temperature resistant blow-molded plastic container useful for packaging food product such as beverage

and other food products (col. 2, ll. 55-67). Prevot teaches employing its novel dome on any size or shape of conventional high temperature resistant blow-molded container (“wide mouth jars, or narrow neck bottles”), especially those having “flexible panels” to “accommodate volumetric changes in the hot-filled container after it has been sealed, capped and cooled to ambient temperature” (col. 1, ll. 5-10 and col. 3, ll. 1-27). This description embraces the high temperature resistant container having flexible panels taught by Krishnakumar. Therefore, implicit in Prevot is that the container of the type described in Krishnakumar is available or can be made available in various sizes or shapes, including in the form of “wide mouth jars.”

Accordingly, we concur with the Examiner that the combined teachings of Krishnakumar and Prevot would have rendered the subject matter defined by claims 3 through 21 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

*ORDER*

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

**AFFIRMED**

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